

## Existing Infrastructure Information Sources

January 30, 2009

This paper lists selected currently available sources of information on California waste management and recycling infrastructure.

Table 1 lists 24 Board sources, including both ongoing data gathering programs and one-time activities that are not necessarily regularly updated. Data quality and definitions used vary, and accessing these sources requires navigating across many pages that are not centrally linked. The project team envisions coordinating with relevant Staff activities to gather data and directly link queries to these databases wherever possible. Consequently, for certain regulated industries such as scrap tire processors it is possible that little or no additional data gathering efforts will be needed.

Table 2 lists 32 sources external to the Board. Generally these sources contribute to an inventory of facilities, but they typically do not provide the flow and other operational information being sought. Also, licensing requirements limit the potential to use data from some external sources.

Stakeholders are encouraged to help identify relevant information sources and to provide practical suggestions on the best way to gather data. We will evaluate each option and present a proposed data gathering approach for review in summer 2009.

## Summary of Existing Infrastructure Information Sources

Table 1 - Selected Currently Available Sources of Information on California Waste Management and Recycling Infrastructure from CIWMB

Name	Description	Source	Date Last Modified	Update Frequency	Updated How
BOE Tipping Fees System (Board of Equalization)	An automated system for loading, reviewing, and storing and displaying on the Internet landfill tonnage/tipping fee data collected from landfill operators by the Board of Equalization (BOE) for the Board.	CIWMB/IMB	2008	continuously	Web based user interface, XML data files from the key data-entry operator, and large haulers upload Excel data files.
California Oil Fee and Refund System (COFRS)	COFRS is a database application that stores business information about Oil Manufactures; quarterly oil-fee return information; and oil manufacturer refund claim information. This application is currently receiving a major upgrade into a new system called ORCA (Oil Recycling Claims and Accounting).	CIWMB	2008	Continuously	Staff updates data as they receive information from oil manufacturers
California Waste Stream Profiles	This application is not a database, but rather a dynamic website that pulls information from multiple CIWMB databases for display to the public. Includes demographics, Board assistance (grants, Loans, etc.), related Board actions, disposal and diversion rates, and facilities information, GIS mapping capabilities.	CIWMB		Continuously	Displays data as updated in various CIWMB databases.
CalMAX Database	Contains the data necessary to support the California Materials Exchange (CalMAX) Web application, the primary record types are advertisers (people & organizations), advertisements (online "classified ads"), and exchanges (records of the exchange of materials). Advertisements are for free (or low cost) giveaways/exchanges of reusable stuff. Currently very low usage--unclear if low usage is due to minimal promotion by program staff and/or lack of interest by the public and/or business community.	CIWMB/IMB	2008	Continuously	Voluntary submission of information by the user community via the CalMAX Web application.

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Name	Description	Source	Date Last Modified	Update Frequency	Updated How
Compost and Mulch Facilities Directory	Producers of compost and mulch in California.	CIWMB	See SWIS	See SWIS	Data comes from the Solid Waste Information System (SWIS)
Construction and Demolition Debris Recyclers	Processors and/or recyclers of construction and demolition debris.	CIWMB	2008	As needed	Staff survey recyclers as time permits. Recyclers can also submit updates to be entered by staff.
eDRS - Electronic Disposal Reporting System (Part of LoGIC)	<p>Amount of solid waste disposed by California jurisdictions. Counties are required to submit a quarterly disposal report to the board. Local officials use data from the system to calculate their diversion rate estimates. The system is also used to:</p> <ol style="list-style-type: none"> <li>1) Track waste exported out of state, 2) Track types and amounts of alternative daily cover (ADC) and alternative intermediate cover (AIC), 3) Identify variability in jurisdiction waste disposal amounts over time, and 4) Identify changes in the flow of waste disposed over time.</li> </ol> <p>Disposal includes: 1) All solid waste disposed by all sources (residents, businesses, institutions, self-haul, construction and demolition sites, military bases, government agencies, etc.), 2) All solid waste disposed at Board-permitted landfills and transformation facilities, and 3) All solid waste exported out of state for disposal.</p>	eDRS / LoGIC	2008	quarterly	Currently, staff upload most data from Excel files. Starting in 2009, jurisdictions can upload their own data via the web.
Electronic Annual Report (EAR)	Report submitted by each jurisdiction measuring their progress on waster diversion. Currently a separate, standalone system from LoGIC, although will be merged soon into the LoGIC database.	CIWMB/IMB	2008	Annual	Users submit reports via web-based form.

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Name	Description	Source	Date Last Modified	Update Frequency	Updated How
E-Waste	The E-Waste Database Management System allows E-Waste Program Staff to track and approve collectors, recyclers, and manufacturers interested in participating in the E-Waste Payment Program. This system allows Program Staff to manage payment claims to recyclers, monitor net costs of E-Waste recycling, and evaluate the effectiveness of the program.	CIWMB/IMB	2009	Continuously	Participants mail/submit information via Applications, Claims, Net Cost Reports to E-Waste Program Staff, who enters all Applications information and selected/summary information for Claims and Net Cost.
Grants Management System (GMS)	Information about the Board's grants and grant programs	CIWMB	2009	Continuously	Staff enter data as received.
LEA Mail	Local enforcement agencies (LEA) are designated by the governing body of a county or city and, upon certification by the Integrated Waste Management Board, are empowered to implement delegated Board programs and locally designated activities. LEAs have the primary responsibility for ensuring the correct operation and closure of solid waste facilities in the state. They also have responsibilities for guaranteeing the proper storage and transportation of solid wastes.	Local Governments	1998	as needed.	manually.
Local Enforcement Agency (LEA) Directory	Contacts by counties or statewide.	CIWMB	2008	As needed/continuously	Manually
Local Government Contacts Directory	Contact information for certain local government staff	CIWMB	2009	As needed/continuously	Users send updates via a web form, staff enters in database.

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Name	Description	Source	Date Last Modified	Update Frequency	Updated How
Materials Collection Database (MCD)	Contains information for tracking materials collected at reuse/recycling facilities (landfills, transfer stations, material recovery facilities, composting sites, transformation facilities, waste tire sites, and closed disposal sites). The database contains information about location, types of materials accepted, and collection methods. This is one of our key facility databases and is anticipated to be the core of future infrastructure/facility-related data capture/management.	CIWMB/IMB	2008	Continuously	Web based user interface; Staff verify data on a quarterly basis by emailing/calling facilities to verify facility and material information
Plastics Recyclers and Processors Directory	Processors and/or recyclers of various plastics	CIWMB	2008	Annually	Staff survey stakeholders annually and enter data.
Recycled-Content Newsprint	Compliance with the Board's minimum recycled content newsprint program	CIWMB	2009	Annually	Staff enter data from forms submitted by newsprint users.
RMDZ Database	Database of the Board's Recycling Market Development Zones (RMDZs), the recycling businesses located within them, and the loans granted to some of these businesses. Includes some basic reporting capabilities on the businesses and loans at <a href="http://www.ciwmb.ca.gov/RMDZ/Reports/">http://www.ciwmb.ca.gov/RMDZ/Reports/</a> . System is undergoing an upgrade to the Board's current database and application development standards. Facility inputs information only available for businesses that received loans, and only relates to the period of that loan.	CIWMB/IMB	2004	a few times a year	Via an MS Access UI to our SQL Server. Soon via a web-based application.

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Name	Description	Source	Date Last Modified	Update Frequency	Updated How
Solid Waste Information System (SWIS III)	The Solid Waste Information System (SWIS) database contains information on solid waste facilities, operations, and disposal sites throughout the State of California. The types of facilities found in this database include landfills, transfer stations, material recovery facilities, composting sites, transformation facilities, waste tire sites, and closed disposal sites.	CIWMB/IMB	1995	daily	scanned inspection information is uploaded, otherwise staff update it.
Solid Waste Landfilling Data	Information on tipping fees and tonnage of waste disposed of in California's landfills since 1990. This is not a database, but a web page updated manually with information from the Board of Equalization (BOE).	CIWMB	2003	Used to be annually, but is not currently a staff priority.	Manually
State Agency Buy Recycled Campaign (SABRC)	The State Agency Buy Recycled Campaign (SABRC) requires that every State department, board, commission, office, agency-level office, and cabinet-level office must report purchases of recycled-content products. Annual SABRC reports are to be submitted to the California Integrated Waste Management Board on a fiscal year basis.	CIWMB/IMB	2008	Annually	Web form completed by State Agencies.
Used Oil Recycling System (UORS)	UORS is a database application that stores business information about Used Oil Generators (Collection Centers, Industrial Generators, Curbside Collection Programs, and Electric Utilities); oil recycling incentive claim information from Oil Generators; and Used Oil Haulers' and Recyclers' business data, along with related quantities of oil moved or processed by these facilities. This application is currently receiving a major upgrade into a new system called ORCA (Oil Recycling Claims and Accounting).	CIWMB	2008	Continuously	Staff updates data as they receive information from oil generators / haulers / recyclers

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Name	Description	Source	Date Last Modified	Update Frequency	Updated How
Waste Characterization Database	Database can be used to estimate the characteristics of the commercial sector and residential sector disposed waste streams for any city in California, and determine which business groupings contribute the most material to the waste stream. Additional pages contain general information such as waste disposal rates for business types and specific waste compositions for certain business types. Also included are single-family and multi-family waste compositions and disposal rates.	CIWMB/IMB	1998	every few years by a contractor	Via an MS Access UI to our SQL Server, although updates come from the contractor. Last update was 1999 data--an update is pending from program staff.
Waste Tire Manifest System (WTMS)	Management of all aspects of CIWMB's waste tire programs: annual Hauler and vehicle registration, Hauler manifests (data and scanned images), Facility Inspections (data and scanned images), Enforcement actions against Haulers and Facilities, and Permit tracking for Major and Minor waste tire facilities.	CIWMB/IMB	2008	continuously	Web based user interface, XML data files from the key data-entry operator, and large haulers upload Excel data files.

## Summary of Existing Infrastructure Information Sources

Table 2 - Selected Currently Available Sources of Information on California Waste Management and Recycling Infrastructure from Sources outside of CIWMB

Name	Description	Source	Date Last Modified	Update Frequency	Updated How
2007 Electronics Recycling Directory	The directory provides information on the electronics recycling industry facilities world wide.	Recycle Today	2008		Facilities have the ability to update own information
2009 North American Scrap Metals Directory	The directory provides information on the scrap metal industry facilities.	Recycle Today	2008	Annually	Facilities have the ability to update own information
2009 Paper Recycling Markets Directory	The directory provides information on the paper industry facilities.	Recycle Today	2008	Annually	Facilities have the ability to update own information
AF&PA/ABA Survey Projects	Survey of Solid waste coordinators from 2007	R.W. Beck	2007	N/A	Data collected contains information related to community recycling programs the solid waste coordinator was contacted. This information would provide a community contact.
American Chemistry Council		American Chemistry Council			No information related to collection of data
American Plastics Council	Directory lists recycled products directory showing the locations where consumers can purchase recycled goods as well as markets for recyclable goods	Association of Post-Consumer Plastics Recyclers		Annually	Companies can add their name to the list via website
APC Market Survey Project	Survey of plastic markets from 2007	R.W. Beck	2007	N/A	N/A



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Name	Description	Source	Date Last Modified	Update Frequency	Updated How
Association of Post-Consumer Plastics Recyclers	Website list - The APR Buyers and Sellers List is an outline of the material that is bought and sold by APR members, who represent 90% of the post-consumer plastics recycling processing capacity in North America. The list is updated annually for the benefit of our members and interested parties.	Association of Post-Consumer Plastics Recyclers		Annually	
CA Department of Conservation, Division of Recycling	Info Available on an ongoing basis (subject to their sensitivity about confidentiality): <ul style="list-style-type: none"> <li>- Lists of beverage container processors by material type including glass beneficiators, plastics reclaimers, aluminum/scrap handlers, etc.</li> <li>- Lists of manufacturers using recycled glass, plastic, aluminum</li> <li>- Lists of curbside recycling programs and redemption centers/buy-back recycling centers (not covered in the project but perhaps worth noting)</li> <li>- For all of the above, information on the types of materials handled and volume (via payments DOC makes, but they probably won't release it)</li> </ul>	CA Department of Conservation	2007	Annually	Interviews, Web site information,
CA REI Project	project conducted surveys to gather key economic statistics on the nation's recycling and reuse industries	R.W. Beck	2001	N/A	The database is 8 years old, it is not updated
Chartwell Municipal Solid Waste (MSW) Facility Directory	The directory provides basic information about 6,500 municipal solid waste facilities. The scope of facilities that are covered includes MSW landfills, waste to energy, material recovery facilities, and others.	Chartwell	2007	Annually	Compiled by telephone and written surveys
Construction Materials Recycling Association	Directory lists the locations where C&D materials is accepted and recycled.	Construction Materials Recycling Association			as companies join CMRA they get added to the list

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Name	Description	Source	Date Last Modified	Update Frequency	Updated How
Earth911.com	provides information on recyclable materials, find over 100,000 recycling locations across the country. With information provided by local governments, industry insiders, organizations and everyday consumers, you can recycle hundreds of products from packing peanuts to computers.	Earth911.com	1991	Daily	Information provided by local governments, industry insiders, organizations and everyday consumers
Glass Packing Institute	Provides a list of several manufactures and suppliers in CA.	GPI		monthly	Unknown
Info USA	Online Directory allows you to search for business by industry or SIC, NAICS codes	Info USA	2008	Annually	Compiled by telephone, written surveys, catalogue 5,200 phone books, annual reports and other business directories, public records from county courthouses, SEC, and 10K filings, new utility hookups, updated monthly with change of address listings
Lockwood-Post's Directory of the Pulp, Paper, and Allied Trades	Directory of Paper Industry, includes lists of industry officials, trade associations, watermarks and brands, and grades of rags and waste paper stock consumed by paper mills, plus a large amount of statistical information.	Lockwood-Post	2008	Annually	Compiled by telephone and written surveys
Materials Processing & Recycling Industry in the U.S. Yearbook & Directory - 2007-2008	Directory of Materials Recycling (MRFs) and Mixed Waste Processing Facilities (MWPFs) in the United States.	Recycle Today	2007		Facilities have the ability to update own information
MRF Book 07-08	Directory of MRFs in US.	GAA	2008		Information provided by surveys

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Name	Description	Source	Date Last Modified	Update Frequency	Updated How
R.W. Beck Landfill Benchmark Survey	Project collected landfill information, tip fee, permitted capacity, actual tons per day, phone numbers, contact names, for communities neighboring Santa Barbara.	R.W. Beck Landfill Benchmark Survey	2001		N/A
Recyclestuff.org	San Jose State University, CA website, information available: Guide to : Recycling Centers, Reuse and Resale in Santa Clara, Recycling Providers and Applicable Local Regulations, City Service, Recycled Content Product Resources, Office recycling, Electronics Reuse and Recycling, Composting, etc.	San Jose State University Center for the Development of Recycling	2001		
Recycling Markets. Net	Provides a list of "over 17,000" companies involved in the recycling process in USA and Canada. It lists recycling markets and recycling products.	Recycling Markets. Net		monthly	Unknown
Recycling Today's 2009 Directory of Plastics Recyclers - Shipping in December	The directory provides information on the plastic industry facilities.	Recycle Today	2008	Annually	Facilities have the ability to update own information
REI Database	provides information on recycle facilities, notes type of recycling facility, # of employees, annual payroll, the input and output of recycled goods at the facility. (Data is dated and not updated)	R.W. Beck REI project	2007	Never	Information provided by surveys
Resource Recycling	A trade publication that provides the latest information about post-consumer waste recovery efforts. This includes collection system assessments, processing developments, markets analyses, legislative and regulatory reviews.	Trade Publication	2008	daily	The database is updated daily as they install new orders, renewals, and address changes from their subscribers.
Reuse Development Organization	Directory lists the locations where materials capable of being reused are collected and redistributed.	Reuse Development Organization			Unknown

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Name	Description	Source	Date Last Modified	Update Frequency	Updated How
Rubber Manufacturers Association	Directory of manufacturers of rubber goods	Rubber Manufacturers Association			
Rubber Red Book	Buyers guide to the rubber industry provides information in products and services including: Rubber Machinery & Equipment, Laboratory & Testing Equipment, Accessories and Fittings, Rubber Reclaimers & Recyclers, Rubber Chemicals & Compounding Materials, Synthetic Rubber, Fabrics and Textiles, Latex and Related Materials, Educational Courses in Rubber Chemistry and Technology, Technical and Trade Journals.	Rubber Red Book	2007	Annually	information provided by private companies
Steel Can Recycling Institute	Directory lists the locations where steel recyclables are accepted, curbside recycling is listed in the directory.	Steel Can Recycling Institute			Unknown
Stopwaste.org	Alameda County, CA website, has information on: where to recycle, what to recycle, where to buy recycled goods, recycling programs for businesses, funding information for businesses, bay-friendly landscaping, information on green buildings, etc.	Stopwaste.org			
Thomas Net	Online business directory, lists companies by industry.	Thomas Net	2008	Daily	Private companies update their information, web site address, phone number, location, company description, and industry sector.
Vinyl Institute Recycling Directory	Directory of Vinyl recyclers in North America	Vinyl Institute	1982		

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Name	Description	Source	Date Last Modified	Update Frequency	Updated How
Waste Business Journal Directory & Atlas of Non-Hazardous Waste Sites 2008	Directory provides information on the detailed operations of landfills, WTE, MRFs, C&D landfills, TS, Composting operations. Provides mapping of disposal sites	WBJ	2008	Ongoing	Research done by WBJ staff